

LISTING OF CLAIMS:

The following listing of claims replaces all previous versions, and listings of claims in the present application.

1. (Currently Amended) A power supply device for supplying electric power to an electrical circuit, the power supply device comprising:

a power source;

a first divider resistor connected between the power source and a divider node;

a second divider resistor connected between the divider node and ground;

a voltage comparator connected to the divider node for comparing a divided voltage at the divider node with a reference voltage and for outputting a control signal when the divided voltage is higher than the reference voltage; ~~and~~

a protecting switch disposed in a circuit between the power source and the electrical circuit, the protecting switch being turned off when the control signal is supplied from the voltage comparator to the protecting switch, thereby protecting the electrical circuit from overvoltage; and

a voltage booster for boosting the power source voltage to a predetermined voltage level,
the voltage booster being disposed in a circuit connecting the power source and the electrical
circuit,

wherein the protecting switch also functions as a rectifying diode.

2. (Canceled)

3. (Currently Amended) The power supply device as in claim 2 1, wherein:

the protecting switch is disposed between the power source and the voltage booster.

4. (Currently Amended) The power supply device as in claim 2 1, wherein:

the protecting switch is disposed in the voltage booster.

5. (Currently Amended) The power supply device as in claim 2 1, wherein:

the protecting switch is disposed between the voltage booster and the electrical circuit.

6. (Currently Amended) A power supply device for supplying electric power to an electrical circuit, the power supply device comprising:

a power source;

~~a first divider resistor connected between the power source and a divider node;~~

~~a second divider resistor connected between the divider node and ground;~~

a voltage comparator connected to the power source for comparing a voltage of the power source with a predetermined reference voltage ~~divider node for comparing a divided voltage at the divider node with a reference voltage~~ and for outputting a control signal when the divided power source voltage is higher than the reference voltage;

a voltage booster for boosting the power source voltage to a predetermined voltage level,
the voltage booster being disposed between the power source and the electrical circuit, the

voltage booster comprising a booster coil, a booster switch for switching current flowing through the booster coil at a high speed, and a rectifying diode for allowing current to flow only in one direction from the booster coil to the electrical current;

~~a protecting switch disposed in a circuit between the power source and the electrical circuit, the protecting switch being turned off~~ the voltage booster for disconnecting the electrical circuit from the power source when the control signal is supplied from the voltage comparator to ~~the protecting switch~~, thereby protecting the electrical circuit from overvoltage; and,

~~a voltage booster for boosting the power source voltage to a predetermined voltage level, the voltage booster being disposed in a circuit connecting the power source and the electrical circuit,~~

~~wherein the protecting switch is disposed in the voltage booster,~~

~~wherein the voltage booster comprises a booster coil, a booster switch for switching current flowing through the booster coil at a high speed, and a rectifying diode for allowing current to flow only in one direction from the booster coil to the electrical circuit, and~~

wherein the protecting switch also functions as the rectifying diode in the voltage booster.

7. (Original) An airbag system for use in an automotive vehicle, the airbag system having an airbag to be inflated with gas upon detection of a collision and an igniting circuit for igniting a device for generating the gas, wherein electrical power is supplied from the power supply device defined in claim 1 to the igniting circuit.

8. (Previously Presented) The power supply device as in claim 1, wherein at least one of the first divider resistor and the second divider resistor is a variable resistor.

9. (Previously Presented) The power supply device as in claim 1, further comprising a reference voltage source for providing the reference voltage.

10. (Previously Presented) The power supply device as in claim 9, wherein the reference voltage source is a variable voltage source battery.

11. (Canceled)

12. (Currently Amended) The power supply device as in claim ~~11~~ 6, wherein the protecting switch is disposed between the power source and the voltage booster.

13. (Currently Amended) The power supply device as in claim ~~11~~ 6, wherein the protecting switch is disposed in the voltage booster.

14. (Currently Amended) The power supply device as in claim ~~11~~ 6, wherein the protecting switch is disposed between the voltage booster and the electrical circuit.

15. (Previously Presented) An airbag system for use in an automotive vehicle, the airbag system having an airbag to be inflated with gas upon detection of a collision and an igniting circuit for igniting a device for generating the gas, wherein electrical power is supplied from the power supply device defined in claim 6 to the igniting circuit.

16. (Previously Presented) The power supply device as in claim 6, wherein at least one of the first divider resistor and the second divider resistor is a variable resistor.

17. (Previously Presented) The power supply device as in claim 6, further comprising a reference voltage source for providing the reference voltage.

18. (Previously Presented) The power supply device as in claim 17, wherein the reference voltage source is a variable voltage ~~source~~ battery.

19. (New) The power supply device as in claim 1, wherein the voltage booster comprises a booster coil.